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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,191	12/05/2003	Gary L. Swoboda	TI-34672	2408
23494	7590	03/31/2010		
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EXAMINER				
WOOLCOCK, MADHU				
ART UNIT		PAPER NUMBER		
2451				
NOTIFICATION DATE		DELIVERY MODE		
03/31/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@ti.com

Office Action Summary

Application No.

10/729,191

Applicant(s)

SWOBODA ET AL.

Examiner

MADHU WOOLCOCK

Art Unit

2451

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/12/2010 has been entered. Claims 1, 4, 6 and 9 have been amended and claims 5 and 11 were previously cancelled. Claims 1-4 and 6-10 remain pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 6 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the claims are amended to recite "content whose essence is the same as content contained in the first packet", and it is unclear what is intended by "**essence** is the same". Prior to the amendment, the claim recited "a continuation of content", interpreted as the packets being different pieces of data which make up parts of the same content. The amended claim language is ambiguous regarding whether "content whose essence is the same" is different content which makes up the same collection of data or if the content of the packets is intended

to be exactly identical content. For purposes of examination it is assumed to be the former, however if this interpretation is incorrect, Applicant is requested to provide specific citations to portions of the specification where there is support for the packets within the subgroup containing exactly identical content.

3. Applicant's argument regarding the previously raised rejection of claims 1, 6 and 9 under 35 USC 112 for the term "a single field" has been considered. Applicant's explanation and citations to the specification designates that the "single field" is synonymous to the "packet subgroup". This clarification obviates previously raised objection, as such the rejection is hereby withdrawn.

4. Applicant's amendment to claim 4 in response to the rejection under 35 USC 112 has been considered. The amendment to the claim obviates previously raised objection, as such the rejection is hereby withdrawn.

Response to Arguments

5. Applicant's arguments regarding the applied references failing to teach "a remainder of said further packets follow the first packet in said at least one packet subgroup and contain content whose essence is the same as content contained in the first packet such that said at least one packet subgroup constitutes a single field in the trace stream" have been fully considered but they are not persuasive.

Specifically, the amended "content whose essence is the same" is interpreted as meaning that that the first packet and the further packets following the first packet contain content which makes up the same essence of data. The Maes reference discloses this feature wherein the Blocks, made up by a first IntraFrame and one or more following InterFrames, makes up a file segment of speech to be transmitted. Therefore, in both the claimed invention and the reference, packets of data are used to make up pieces of a whole. The rejection is therefore maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. Claims 1-4 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maes (Pub. No.: US 2002/0184373) in view of Jensen (Pub. No.: US 2002/0143988) and in further view of Kapoor (US Patent # 5,818,852).

Regarding claim 1, Maes teaches a method of producing a packet group for use in a trace stream of packets that includes a plurality of packet groups, comprising:

providing at least one header packet (Segment Header) within the packet group (Segment) [0114]; and

arranging at least one plurality of further packets (frames) to form a corresponding at least one packet subgroup (Block) within the packet group (Segment) ([0114], see FIG. 3);

wherein a first of said further packets (IntraFrame) includes first features [0111], wherein a remainder of said further packets (InterFrame) follow the first packet (IntraFrame) in said at least one packet subgroup (Block) (IntraFrame is the first frame of a Block, [0111]) and contain content whose essence is the same as content contained in the first packet (each Block comprises a single IntraFrame and one or more InterFrames, [0111]) such that said at least one packet subgroup constitutes a single field in the trace stream (each Block can be decompressed on its own, [0113]), and wherein each of said remainder of said further packets (InterFrames) has a second feature that differs from said first extension portion (the InterFrames may be coded differently than the IntraFrames, [0112]). However, Maes does not explicitly disclose each of said further packets having an extension portion and a payload portion or wherein a first of said packets includes a first said extension portion and wherein each remainder of said further packets has a second said extension portion.

Jensen teaches wherein each further packet has an extension portion (first frame fragment indicator (FFFI), 315 of FIG. 3) and a payload portion (payload data, 305 of FIG. 3); and

wherein a first of said further packets (frame fragment 405₁ of FIG. 4) includes a first said extension portion (FFFI is set to TRUE, 430₁ of FIG. 4), and wherein each remainder of said further packets (405₂ and 405₃ of FIG. 4) has a second extension portion (FALSE, 430₂ and 430₃ of FIG. 4).

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize an extension portion in each packet in the system/method of Maes as suggested by Jensen in order to be able to identify the first packet verses following packets of a subgroup when they are not otherwise coded differently. One would be motivated to combine these teachings because in doing so the system/method could be used in a wider range of implementations for various types of data. However, although Maes teaches a field in the header packet (Segment Header) which indicates the number of packets (frames) in the packet group (Segment), Maes-Jensen do not explicitly disclose a field in the header packet indicating a number of packet subgroups provided in the packet group.

Kapoor teaches wherein a field in at least one header packet indicates a number of packet subgroups provided in a packet group (the header may also include the number of subframes in the frame, column 3 lines 15-17).

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize a header which includes the number of subframes in a frame

in the system/method of Maes-Jensen as suggested by Kapoor because doing so would provide improved identification information to a receiver regarding a group (or frame). One would be motivated to combine these teachings because it would also allow for an indication of how to determine the end of a Segment which comprises a different number of frames per Block.

Regarding claim 2, Maes teaches the method as recited in claim 1 wherein said packet group (e.g. Speech Segment of FIG. 3) ends when a next packet of the trace stream (e.g. Silence Segment Header of FIG. 3) that immediately follows a packet of the last packet subgroup (third Block of the first Segment, FIG. 3) does not have the feature of the remainder of packets (InterFrame).

Jensen teaches the remainder of packets feature being a second extension portion (FALSE, 430₂ and 430₃ of FIG. 4).

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize an extension portion in each packet in the system/method of Maes as suggested by Jensen in order to be able to identify the first packet verses following packets of a subgroup when they are not otherwise coded differently. One would be motivated to combine these teachings because in doing so the system/method could be used in a wider range of implementations for various types of data. However, although Maes teaches a field in the header packet (Segment Header) which indicates the number of packets (frames) in the packet group (Segment), Maes-Jensen do not

explicitly disclose a field in the header packet indicating a number of packet subgroups provided in the packet group.

Regarding claim 3, Maes teaches the method as recited in claim 2 wherein said next packet (e.g. Silence Segment Header of FIG. 3) begins a new packet group (second Segment of FIG. 3).

Regarding claim 4, Maes teaches the method as recited in claim 1 where said number of packets (e.g., specifies N3 silence frames, FIG. 3), permit identification of a next successive packet subgroup (block) in the trace stream even though said next successive packet group lacks a header packet to identify said position (Given that Maes teaches Segment Headers which specify the number of frames per segment it would be obvious that the system/method will determine when one Segment ends and another begins without the need to insert an additional File Header, see FIG. 3).

However, Maes does not explicitly disclose a first and second extension portions permit a position in the trace stream.

Jensen teaches a first (FFFI is TRUE) and second extension (FFFI is FALSE) portion permit a position in a trace stream [0029].

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize an extension portion in each packet in the system/method of Maes as suggested by Jensen in order to be able to identify the first packet verses following packets of a subgroup when they are not otherwise coded differently. This

would provide a way to identify the frames position in the segment. One would be motivated to combine these teachings because in doing so the system/method could be used in a wider range of implementations for various types of data.

However, Maes-Jensen do not explicitly disclose said number of packet subgroups permit a position in the trace stream.

Kapoor teaches said number of packet subgroups permit a position in the trace stream (the header may also include the number of subframes in the frame, column 3 lines 14-22).

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize a header which includes the number of subframes in a frame in the system/method of Maes-Jensen as suggested by Kapoor because doing so would provide improved identification information to a receiver regarding a group (or frame). One would be motivated to combine these teachings because it would also allow for an indication of how to determine the end of a Segment which comprises a different number of frames per Block.

Regarding claim 9, Maes teaches a method for transferring information from a target processor to a host processing unit in a trace stream of packets, the method comprising:

dividing the packets into packet groups (the RECOVC File further comprises one or more Segments, [0114]);

formatting each packet group (Segment) to include at least one header packet (corresponding Segment Header, [0114]); and

formatting each packet group (Segment) to include at least one packet subgroup (Block) containing a plurality of further packets (each Block comprises a single IntraFrame and one or more InterFrames, [0111]); further limitation(s) are substantially the same as those discussed on claim 1 above, same rationale of rejection is applicable.

Regarding claim 10, this method claim comprises limitation(s) substantially the same as those discussed on claim 2 above, same rationale of rejection is applicable.

7. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maes-Jensen-Kapoor in view of Williamson (Pub. No.: US 2003/0041166).

Regarding claim 6, Maes-Jensen-Kapoor do not explicitly disclose a host processing unit and a target processor, wherein the target processor transmits trace streams to the host processing unit, the trace streams permitting the host processing unit to reconstruct the operation of the target processing unit, and at least one of the trace streams comprising a sequence of packet groups.

Williamson teaches a processor test and debug system, the system comprising:
a host processing unit (first host, [0023]); and

a target processor (second host, [0023]), the target processor transmitting trace streams of packets to the host processing unit (the second software tool transmits data to the first software tool running on the first host, [0023]), the trace streams permitting the host processing unit to reconstruct (perform error checking and/or assemble) the operation of the target processing unit [0027], at least one of the trace streams comprising a sequence of packet groups (plurality of data entities, [0010]), each said packet group including limitation(s) substantially the same as those discussed on claim 1 above, same rationale of rejection is applicable.

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize transmitting and debugging between a host and target processor in the system/method of Maes-Jenson-Kapoor as suggested by Williamson in order to ensure an efficient and error-free system. One would be motivated to combine these teachings because verifying the quality of the transmission medium and the transmitted data results in a user being provided with an enhanced and reliable system.

Regarding claim 7, this system claim comprises limitation(s) substantially the same as those discussed on claim 2 above, same rationale of rejection is applicable.

Regarding claim 8, this system claim comprises limitation(s) substantially the same as those discussed on claim 3 above, same rationale of rejection is applicable.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MADHU WOOLCOCK whose telephone number is (571)270-3629. The examiner can normally be reached on Monday-Thursday 8:30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. W./
Examiner, Art Unit 2451

/Hassan Phillips/
Primary Examiner, Art Unit 2451